

## BOOK REVIEWS

*South Carolina Bird Life.* By ALEXANDER SPRUNT, JR., and E. BURNHAM CHAMBERLAIN. (Contrib. XI Charleston Mus., University of South Carolina Press, Columbia, S. C., 1949.) xx + 585 pp., 35 colored plates, 49 photographs, 1 map. \$10.00.

This is a state bird book in the grand tradition. Text, illustrations, format, and typography are all opulent. In a day of high printing and engraving costs, bird students will marvel at the richness of the volume, and may well expect to wait many a year before they again see a new book that is comparable.

Ornithological work in South Carolina is itself in the best tradition of the science. The authors of this volume point out that more species of birds have been made known to science from South Carolina than from any other state. Catesby, Bartram, Audubon, and Bachman were pioneers of natural history study in the colonial years of Carolinian settlement, and in the period following the Declaration of Independence. Coues, Merriam, and Loomis carried on the work during the middle years of the last century. Arthur T. Wayne became the foremost resident ornithologist of the Low Country, his active work extending from 1883 to 1930. Sass, Weston, Tomkins, and others are of the present generation of bird students. Sprunt and Chamberlain, themselves in the foremost rank of American ornithologists, have, with the able editorial assistance of E. Milby Burton, had the pleasant and fruitful task of presenting in this volume the harvest of South Carolina bird lore.

So much of the state's ornithological work has centered in the Low Country, of history and tradition, that one inclines to forget the piedmont and mountain sections. The authors have not neglected these regions, although they regret the comparative scarcity of resident bird students in them. For purposes of ecological study, they divide the coastal plain area into barrier beaches, sea islands, salt marshes, swamps, ricefields, and mainland. Piedmont and mountain regions are treated as units.

After acknowledgments, and a foreword by E. Milby Burton, Director of the Charleston Museum, the volume presents a comprehensive historical survey of ornithological work in South Carolina. This is followed by a list of bird species and races whose type localities are in South Carolina. There is an ecological description of the state as it breaks down into natural regions, and an informative chapter "On Studying Birds". The body of the book is made up of descriptions and discussions of 442 species and races of birds which have been recorded from the state. Appended is a list of seventeen species which have been given hypothetical status. There is a comprehensive index.

Under each species is an English translation of the scientific name which will be welcomed by many users of the book. Local names for the species are recorded, followed by description, general range, and status in South Carolina. Discussions of species include history and notes on food habits.

Special mention must be made of the book's illustrations. Color plates, thirty-five of them, are by Francis Lee Jaques, Roger Tory Peterson, Edward von S. Dingle, and John Henry Dick. With the oil paintings of Jaques and the water colors of Peterson most bird students are familiar. They have come to expect from these artists the very finest in bird portraiture, and both are at their best in the present volume. Dingle and Dick, both local artists, are not, perhaps, so well known to the public, although their work in this book should go far toward bringing them the recognition which they deserve. They give fresh approaches to bird art, and some of their plates, particularly Dick's warblers, are as delicate and lovely as this reviewer has seen. Photographs in the volume, from many sources, are well-chosen, representative, and beautifully reproduced.

In a book of such excellence, the reviewer can find little with which to quibble. There will be those to question the inclusion of a number of species whose recorded occurrences in South

Carolina depend solely on sight identification. Most such records are of strikingly-marked birds, and the authors place their trust in the competence of the observers. Loomis's account of breeding Bush-Tits in the Carolina piedmont is an extraordinary one, and Northern observers will join their Southern brethren in resentment that his verifying specimens should have been destroyed by fire set by General Sherman's army. The authors of this volume have assigned these Bush-Tits to a definite race, the California Bush-Tit. Similarly, they have assumed that the only Burrowing Owl recorded in the state was a Western Burrowing Owl. All the weight of probability may be in their favor, but these are guesses, and in making them the authors have, or so it seems to this reviewer, laid themselves open to criticism.

Concerning the putative recent status of Carolina Paroquets in the Santee Swamp, there is room for much healthy argument. Sprunt firmly believes that these birds were present as late as 1936-38. Others who were on the ground are very doubtful. In any event, readers will enjoy the account of this bird, as well as the discussions of such other rarities as Ivory-billed Woodpecker and Bachman's Warbler.

Only a few of the southeastern states have had published definitive bird books of high scientific, literary, and artistic merit. *South Carolina Bird Life* takes its place in the front rank of such state manuals. It will bring many readers to see for themselves the mountain country around Caesar's Head, the charm of the Santee Swamp, and the sub-tropical richness of Bull's Island.

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*The Sandhill Cranes.* By LAWRENCE H. WALKINSHAW. (Cranbrook Institute of Science, Bulletin No. 29, 1949.) x + 202 pages, 17 photographic plates, 5 maps and 31 tables.

In 15 years of consuming interest in the Sandhill Cranes, including field excursions that carried him from Alaska to Cuba, the author of this important book on the 4 subspecies of *Grus canadensis* has accumulated an immense amount of data, much of it entirely new. Since Blaauw's *Monograph of the Cranes* (London, 1897) there has been no comprehensive work on the Gruidae. This study is a welcome event and adds vastly to our knowledge of the Sandhill group. With its frequent comparisons with the habits and behavior of other cranes it should be a useful reference for students of the entire family.

The chapter on Molts and Plumages contains detailed comparative tables of weights and measurements. Among other things, these appear to demonstrate the presence of a "prairie intermediate" form, between the larger *G. c. tabida* and the smaller *G. c. canadensis* in size. A diagram shows the details of two partial molts in a captive bird. Other chapters discuss Voice, Crane Behavior, Food and Feeding Habits, Pairing and Territory, Nesting, the Young, the Crane from Fall to Spring and the History of North American Crane Populations. There is a wealth of data on the nests and nest sites of the various subspecies.

Detailed distribution records are listed in an appendix and summer range, nesting record and winter range maps appear elsewhere. There is no method given for relating occurrence locations in the appendix to actual locales on these maps. Nor is the interesting distribution of the different forms related to habitats, beyond brief descriptions of the character of nest sites. The migration maps are good, but their value would have been enhanced if more locations could have been plotted. They refer to the spring and fall movements of *G. c. canadensis* only. The tables giving extreme and average egg and hatching dates are of unique interest, as is that showing frequency of incubation.

Population estimates reflect much careful field work and constitute a definite contribution. It is evident that the Florida and Cuban forms are in need of strong conservation measures if they are to be preserved and it may come as a surprise to many that the Greater Sandhills are so few in number. Limiting factors are discussed briefly.